PETROV, I.R., prof.; KULAGIN, V.K., doktor med. nauk

Resolution of the Plenary Session of the Board of the All-Union Society of Pathophysiologists on January 31, 1963. Pat fiziol. i eksp. terap. 7 no.3:85-86 My-Je'63 (MIRA 17:4)

1. Predsedatel' pravleniya Vsesoyuznogo obshchestva patofiziologov; deystvitel'nyy chlen AMN SSSR (for Petrov). 2. Sekretar' pravleniya Vsesoyuznogo obshchestva patofiziologov (for Kulagin).

PETROV, I.R.; KULAGIN, V.K.

Qualitative characteristics of diseases. Fiz. fiziol. i eksp. terap. 6 no.4:3-8 Jl-Ag '62. (MIRA 17:8)

1. Deystvitel'nyy chlen AMN SSSR (for Petrov).

KULAGIN, Viktor Konstantinovich; KONSTANTINOV, M.V., red.

[Role of the adrenal cortex in the pathogenesis of trauma and shock] Rol' kory nadpochechnikov v patogeneze travmy i shoka. Leningrad, Meditsina, 1965. 186 p.
(MIRA 18:4)

KULAGIN, V.K.; BAKHMAN, I.YA.

Pathogenesis and treatment of acute diffuse peritonitis. Izv. AN Arm. SSR. Biol. nauki 18 no.6:81-86 Je '65.
(MIRA 18:9)

1. Kafedra patologicheskoy fiziologii Voyenno-meditsinskoy akademii imeni Kirova, Leningrad.

BUNE, Viktor Ivanovich; KULAGIN, Vladimir Kuz'mich; SOBOLEVA, Ol'ga Vladimirovna; KOZLOV, A.V., otv. red.

[Seismic regime of the Vakhsh District in the Tajik S.S.R.] Seismicheskii rezhim Vakhshskogo raiona Tadzhikskoi SSR. Dushanbe, Izd-vo AN Tadzhikskoi SSR, 1965. 269 p. (MIRA 18:12)

L 43553-66 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(l) BC

ACC NR: AT6014883 (N) SOURCE CODE: UR/2752/65/000/077/0094/0098

AUTHOR: Kiselev, A. N.; Kulagin, V. K. 48 B+1

ORG: None

TITLE: Certain problems of reliability of the digital dispatcher computer

SOURCE: Leningrad. Tsentral'nyy nauchno-issledovatel'skiy institut morskogo flota. Trudy, no. 77, 1965. Avtomatizatsiya i vychislitel'naya tekhnika na morskom flote (Automation and computer engineering in the Merchant Marine), 94-98

TOPIC TAGS: digital computer, computer reliability, programming, coding, error correction coding, error detection coding, naval fleet operation

ABSTRACT: The article discusses an automated system for controlling fleet operations on the basis of an analysis of the operating conditions and by increasing the reliability of digital dispatcher computers. It also discusses a basic group of problems solved by such a system. The authors propose that any increase in reliability requires the development of (a) stable algorithms and programs for problems solved by the system, and (b) a system of experimental and diagnostic test-programs for error location and automatic switching and the employment of a spare excess code mod 3, and redundant circuits and elements. From the viewpoint of the effectiveness of the digital dis-

UDC: 681.142.3.004.6

Card 1/2

L 13653-66

ACC NR: AT6014883 O

patcher computer and its economy of operation, it is most expedient to utilize simultaneously a spare redundant element. The authors conclude that such considerations will enable designers to develop a system that automatically detects errors, locates faults, switches from faulty circuits to operational circuits, and eliminates computational errors.

SUB CODE: 09,14,15/ SUBM DATE: none/ ORIG REF: 004

Card 2/2

L 2812-66 EWT(1)/EWA(h) GW

ACCESSION NR: AT5021047 UR/3160/64/012/000/0054/0066

AUTHORS: Kulagin, V. K.; Pachadzhanova, G. N.; Yepaneshnikova, N. A.

TITLE: A study of crustal structure in the Tadzhik depression by means of SP and PS waves

SOURCE: AN TadzSSR. Institut seysmostoykogo stroitel'stva i seysmologii. Trudy, v. 12, 1964. Sbornik statey po seysmologii (Collection of articles on seismology), 54-66

TOPIC TAGS: seismic wave, earth crust, rock

ABSTRACT: Records of deep-focus Pamir-Hindu Kush earthquakes for 1959-60 were used in this work to study crustal structure in the Tadzhik depression. SP waves formed mainly in the upper crust. Only PS waves were observed from the Mohorovicic discontinuity. For SP waves, the time differential between arrival times of S and SP waves was determined, and for PS waves the time differential between P and PS waves was measured. These time differentials were then plotted against depth differences on the assumption of standard velocity values and velocity ratios. By means of SP waves, interfaces were detected at 2.5-3.0, 5-7, 8-12, and 16-20 km.

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ACCESSION NR: AT5021047

PS waves gave values of 2.5-3.5, 5-7, 9.5-11.5, and 40 ± 5 km. The shallowest interface is apparently within the Mesozoic-Cenozoic sedimentary rocks. The surface at 5-7 km is probably the top of the Paleozoic basement. The surface of the Precambrian basement is assumed to be in the 8-12 or 9.5-11.5 range. It is suggested that the top of the "basaltic" layer may be at 16-20 km, and that the thickness of the crust may be represented by the 40 ± 5 km value. Orig. art. has: 10 figures and 1 table.

ASSOCIATION: Institut seysmostoykogo stroitel'stva i seysmologii, AN TadzSSR (Institute for Earthquake-Proof Construction and Seismology, AN TadzSSR)

SUBMITTED: 00 ENCL: 00 SUB CODE: ES

NO REF SOV: 010 OTHER: 000

Card 2/2

L 2813-66 EWT(1)/EWA(h) GW

ACCESSION NR: AT5021048 UR/3160/64/012/000/0067/0083

AUTHORS: Kulagin, V. K.; Yepaneshnikova, N. A.

TITLE: Structure of the upper part of the earth's crust in the Dushanbe-Vakhsh region

SOURCE: AN TadzSSR. Institut seysmostoykogo stroitel'stva i seysmologii. Trudy, v. 12, 1964. Sbornik statey po seysmologii (Collection of articles on seismology), 67-83

TOPIC TAGS: seismic wave, rock, earth crust, earthquake

ABSTRACT: The Dushanbe-Vakhsh region includes the southern flank of the Gissarskiy Range, consisting chiefly of Late Paleozoic granitic rocks, and the Tadzhik depression, where Mesozoic to Recent sediments are present. Seismic records from industrial explosions and actual earthquakes for the period 1955-59 were used to delineate the structure of the upper crust in this region. Previous work has merely indicated the presence of a vertical east-trending discontinuity (the Gissar-Kokshaal fault) and the presence of a "granite" surface under the sediments to the south. The present study of north-south profiles indicates two well-defined interfaces. The seismic velocity along the upper interface is 5.0-5.5

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ACCESSION NR: AT5021048

km/sec; that along the second is 6.2-6.6 km/sec. The average velocity in the overlying sediments is 4-4.5 km/sec. It is difficult to determine absolute depths, but the topographic relations are rather clearly defined. The average depth to the first interface is about 5 km, that to the second about 10 km. The first interface is considered to be the top of the Paleozoic basement. South of the Gissar-Kokshaal fault the basement descends beneath the Mesozoic-Cenozoic sediments, from 4.5-6 km at the northern edge to 7-8 km southward and southeastward. A sharp break is observed in crossing the Ilyak fault, where a step down of 3-4 km has been computed. The second (lower) interface apparently corresponds to the Precambrian basement. On the western end of the southern flank of the Gissarskiy Range (in the investigated area) this basement is at 2-3 km below the surface; to the east it is 5-6 km. Along the northern edge of the Tadzhik basin this depth is 9-10 km, and southward, in the central and southern parts of the depression, it is 11-13 km. Again a drop of 4-5 km is observed across the Ilyak fault. Orig. art. has: 10 figures and 5 tables.

ASSOCIATION: Institut seysmostoykogo stroitel'stva i seysmologii, AN TadzSSR (Institute for Earthquake-Proof Construction and Seismology, AN TadzSSR)

SUBMITTED: 00 ENCL: 00 SUB CODE: ES

NO REF SOV: 005 OTHER: 000

Card 2/2

VERETENNIKOV, I.S.; KULAGIN, V.M.

Automatizing the preparation of mixtures in mixing machinery.
Ogneupory 19 no.1:24-28 '54. (MIRA 11:8)
(Refractory materials) (Mixing machinery)

KULAGIN, V.M., inzhener.

Mechanization of loading and unloading in station freight yards.
Zhel.dor.transp. 37 no.7:47-50 Jl '56. (MLRA 9:8)
(Loading and unloading)

KULAGIN, V.M., inzh.

Increasing the efficiency of container transportation. Zhel. dor. transp. 40 no. 7:35-38 Jl '58. (MIRA 11:7)
(Railroads--Freight)
(Containers)

GOLUBKOV, Vladimir Vladimirovich; KULAGIN, Viktor Markelovich; NESTERENKO, Mitrofan Akimovich; RIDEL', E.I., red.; KHITROV, P.A., tekhn.red.

[Loading and unloading at railroad stations] Pogruzochno-razgruzochnye raboty na zheleznodorozhnykh stantsiiakh. Moskva, Gos.transp.zhel-dor.izd-vo, 1959. 291 p. (MIRA 12:8)
(Railroads--Freight) (Loading and unloading)

KULAGIN, V.M.

Semiluki Refractories Plant. Ogneupory 27 no.11:509-511 '62. (MIRA 15:11)
(Semiluki—Refractories industry)

DYSKIN, B.M.; BESTEMYANNIKOV, Yu.V.; KULAGIN, V.P.

Use of the ascending method in tree tapping with the aid of chemical action. Gidroliz. i lesokhim.prom. 16 no.3:15-16 '63. (MIRA 16:5)

1. TSentral'nyy nauchno-issledovatel'skiy i proyektnyy institut lesokhimicheskoy promyshlennosti.
(Turpentining)

KULAGIN, Varnov Petrovich; SHUTOV, A.F., red.; KONARDOVA, T.F., red. izd-va; PARAKHINA, N.L., tekhn. red.

[Results of experimental work at the Siberian Zonal Tree-Tapping Station] Rezul'taty opytnykh rabot Sibirskoi zonal'noi stantsii po podsochke lesa. Moskva, Goslesbumizdat, 1960. 30 p. (MIRA 14:9)

(Siberia--Tree tapping)

L 38267-65 EEO-2/EWT(d)/EEC-4 Pn-4/Po-4/Pq-4/Pg-4/Pk-4/Pl-4 BC
ACCESSION NR: AP5007443 S/0286/65/000/004/0068/0068

AUTHORS: Yerokhin, G. N.; Konstantinov, V. D.; Krasovskiy, V. S.; Kulagin, V. S.; Chernousenko, Yu. V. 44 43

TITLE: Method for checking the working order and accuracy of operation of induction compasses and a device applying this method. Class 42, No. 168470 B

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 4, 1965, 68

TOPIC TAGS: compass 9

ABSTRACT: This Author Certificate presents a method for checking the working order and accuracy of operation of induction compasses, e.g., in aircraft, by creating an artificial magnetic field. To conduct the compass check without removing it from the object and without changing the object position in the earth's magnetic field, the earth's magnetic field is neutralized by creating an artificial magnetic field whose magnitude and direction are automatically determined. An artificial field of the earth, variable in any direction in the horizontal plane, can be reproduced; this acts on the sensing element of the induction compass. A device applying this method is provided with units for neutralizing and imitating the earth's magnetic field in the form of electric coils. The coils,

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L 38267-65
ACCESSION NR: AP5007443

which define and vary the artificial magnetic field of the earth, are placed near or inside the sensing element of the induction compass and are engaged by the outer edge part of the device.

ASSOCIATION: Voyenno-vozdushnaya inzhenernaya ordena Lenina krasnoznamennaya akademiya im. prof. N. Ye. Zhukovskogo (Air Force Engineering Academy, Lenin's Order of the Red Banner)

SUBMITTED: 19Sep63 ENCL: 00 SUB CODE: NG

NO REF SOV: 000 OTHER: 000

Card 2/2

Name: KULAGIN, V. V.

Dissertation: A study of the accuracy of belt conveyors

Degree: Cand Tech Sci

Defended at ~~Affiliation~~: Min Higher Education USSR, Leningrad Inst of Precision Mechanics and Optics

~~Defense~~ Publication Date, Place: 1956, Leningrad

Source: Knizhnaya Letopis', No 45, 1956

SOV/146-1-1-12/22

AUTHOR: Kulagin, V.V., Candidate of Technical Sciences

TITLE: On the Accuracy of Belt Transmission (O tochnosti lentovykh peredach)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy - Priborostroyeniye, 1958, Nr 1, pp 81-92 (USSR)

ABSTRACT: Firstly, the paper describes the qualities of the belt transmission system and gives the characteristics of the various fundamental types. Three transmission forms are investigated, dependent on the coupling of the belt with the rollers: a) Smooth rollers with the ends of the belts attached to them; b) Smooth rollers and a free belt; c) Toothed rollers and a perforated belt. For precision instrument transmission the belt is made from high carbon steel with a thickness of 0.05-0.15 mm and a width of 2-20mm. The rollers are made from steel or aluminum alloys with a diameter from 20-150 mm^2. The work load is 5-30 Kg. Further, the author investigates sources of belt transmission

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On the Accuracy of Belt Transmission

errors and discovers: 1) Errors from elastic deformations of the parts arising from variations in the load; 2) Technological errors; 3) Temperature conditioned errors. The paper then derives formulae for the elastic line of a belt generalized for all types of belt transport. Calculational formulae are also given for determining the transmission errors from the amount of deformation of the belt's curvature. The formula is also given for the elastic line of the belt's free section:

$$C_2 = \operatorname{tg} \frac{\varphi_0}{4} e^{-\sqrt{\frac{P}{H}} \cdot S'}$$

Where C_2 is the integration constant, H = firmness of the support to the bend, P = belt tension and φ_0 = angle of firmness of belt. The length of the elastic line of the belt's free section is computed with the formula:

$$\ell = a + r\varphi_0 + \frac{1}{12} r\varphi_0^3$$

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SOV/146-1-1-12/22

On the Accuracy of Belt Transmission

Two formulae are given for belt transmission errors as a result of the curvature deformation of the free section, the first referring to transmissions with one roller and the other transmissions with two rollers, both direct and crossed over. There are 3 sets of schematic diagrams, 1 graph, 1 table and 7 Soviet references.

ASSOCIATION: Leningradskiy institut tochnoy mekhaniki i optiki (Leningrad Institute of Fine Mechanics and Optics)

Card 3/3

RUMYANTSEV, Aleksandr Vasil'yevich; KULAGIN, V.V., kand.tekhn.nauk, retsenzent; BULOVSKIY, P.I., doktor tekhn.nauk, nauchnyy red.; APTEKMAN, M.A., red.; ERASTOVA, N.V., tekhn.red.

[Technological processes in machining conoids] Tekhnologiia izgotovleniia konoidov. Leningrad, Gos. Soiuznoe izd-vo sudostroit. promyshl., 1960. 446 p. (MIRA 13:12)
(Metal cutting)

KRUGER, M.Ya., inzh.; PANOV, V.A., kand. tekhn. nauk; KULAGIN, V.V., kand. tekhn. nauk; POGAREV, G.V., kand. tekhn. nauk; KRUGER, Ya.M., inzh.; LEVINZON, A.M., inzh.; Prinimal uchastiye KALINKEVICH, V.N., inzh.; KAZANSKIY, A.V., kand. tekhn. nauk, retsenzent; DMITRIYEV, A.A., inzh.; SIMONOVSKIY, N.Z., red. izd-va; MITARCHUK, G.A., red.izd-va; SHCHETININA, L.V., tekhn. red.

[Handbook for the designer of optical instruments] Spravochnik konstruktora optiko-mekhanicheskikh priborov. [By] M.IA. Kruger i dr. Moskva, Mashgiz, 1963. 803 p. (MIRA 16:12)
(Optical instruments)

KULAGIN, V.Ya., starshiy elektromekhanik;ADILOV, M., elektromekhanik

Switching repeater on polarized relays. Avtom. telem. i sviaz' 3 no.11: 37-38 N '59 (MIRA 13:3)

1. Aktyubinskaya distantsiya signalizatsii i svyazi Kuybyshevskoy dorogi.

(Electric switchgear)

KULAGIN, YE. S.

Organizatsiia gruzovoi kommercheskoi raboty na zheleznykh dorogakh SSSR. [The organization of commercial operations in freight traffic on the railtoads of the USSR]. 3. izd. ispr, i dop., pod red. M. F. Shamaeva. Moskva, Gos. transp. zhel-dor. izd-vo, 1947. 626 p. diagrs., forms.

DLC: HE 2457.K8

SO: Soviet Trahsportation and Communications, A Bibliography, Library of Congress Reference Department, Washington, 1952, Unclassified.

KULAGIN, V.S.

Organizatsiia kommercheskoi raboty na zheleznykh dorogakh SSSR. [Organization of commercial functions on the railroads of the U.S.S.R.]. Moskva, Gos. transp. zhel-dor. izd-vo, 1950. 523 p. illus.

DLC:HE2457.K8 1950

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress Reference Department, Washington, 1952, Unclassified.

SOKOLYANSKIY, I.A.;KULAGIN, Yu.A.

Reading of regular print by the blind. Vop.psikhol. 2 no.5:87-95 S-O '56. (MLRA 10:1)

1. Institut defektologii Akademii pedagogicheskih nauk RSFSR, Moskva.
(Blind--Printing and writing systems)

KULAGIN, Yu.A.

Experimental study in perceiving the direction of a sounding object. Vop. psikhol. 2 no.6:83-93 N-D '56. (MLRA 10:2)

1. Kafedra psikhologii Moskovskogo gosudarstvennogo universiteta.
(Sound, Localization of) (Conditioned response)

ZEMTSOVA, M. I.; KULAGIN, Yu. A.; NOVIKOVA, L. A.

"The Use of the Safe Analyzers in Compensation of Visual Function in Blindness"

1. Institute of Defectology, Acad., of Pedagogical Sci. RSFSR.

To be presented at the International Congress on Technology and Blindness, New York, 18-22 June 1962.

L 23431-66 FSS-2/EWT(1)/FCC/EWA(d)/EWA(h) TT/GW

ACC NR: AP6012831 SOURCE CODE: UR/0293/66/004/002/0257/0267

44
B

AUTHOR: Kirdina, G. A.; Kulagin, Yu. M.; Malyshev, A. B.; Nazarova, M. N.; Svidskiy, P. M.; Yudkevich, I. S.

ORG: none

TITLE: Study of the emission intensity in the Earth's radiation belts by the Cosmos-17 satellite

SOURCE: Kosmicheskiye issledovaniya, v. 4, no. 2, 1966, 257-267

TOPIC TAGS: cosmic radiation, radiation belt, corpuscular radiation, radiation intensity measurement, spaceborne measurement/Cosmos-17

ABSTRACT: Four independently operating Geiger and scintillation counters were used on Cosmos-17 to record charged-particle fluxes in the Earth's radiation belts at altitudes of 260—780 km from 22 to 30 May 1963. The counters differed only in their shielding and radiation detectors. Simultaneous measurements of the counting rates made it possible not only to determine the level of the fluxes but also to reach certain conclusions on the composition of the trapped radiation and to establish the hardness of the energy spectrum of the penetrating particles. Based on the composition of particles penetrating a shielding of 1 g/cm^2, it was found that the inner radiation belt can be divided into two regions. At L = 1.15—1.6, the main portion of the fluxes is produced by electrons from nuclear explosions, at L = 1.6—2.5, it

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 UDC: 537.591

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ACC NR: AP6012831

is produced by protons. The flux of protons with energies greater than 30 Mev has increased since 1958. A third narrow region was detected between the inner and outer radiation belts in which electrons with energies of 0.1—1.5 Mev were recorded. Below the lower boundary of the inner belt, stable streams of soft corpuscules, i.e., electrons with energies between 50 and 100 kev, were detected. Orig. art. has: 1 table and 7 figures. [JR]

SUB CODE: 04/ SUBM DATE: 19Apr65/ ORIG REF: 003/ OTH REF: 008/ ATD PRESS: 4235

Card 2/2

L 3095-66 FSS-2/EWT(l)/EWT(m)/FS(v)-3/FCC/EWA(d)/EWA(h) TT/GS/GW
ACCESSION NR: AT5023620 UR/0000/65/000/000/0464/0465

AUTHORS: Kidrina, G. A.; Kulagin, Yu. M.; Malyshev, A. B.; Nazarova, M. N.; Svidskiy, P. M.; Yudkevich, I. S.

TITLE: Investigation of the radiation intensity in Van Allen belts by the Kosmos-17 satellite

SOURCE: Vsesoyuznaya konferentsiya po fizike kosmicheskogo prostranstva. Moscow, 1965. Issledovaniya kosmicheskogo prostranstva (Space research); trudy konferentsii. Moscow, Izd-vo Nauka, 1965, 464-465

TOPIC TAGS: satellite, satellite data analysis, radiation intensity, Van Allen belt, charged particle, Geiger counter, scintillator, nuclear explosion, electron, proton, solar cycle, solar activity, magnetic activity, geomagnetism

ABSTRACT: Data on the streams of charged particles registered by Geiger counters and scintillators at the elevation of 260-780 km for May 22-30, 1963 are presented. Results obtained with Geiger counters in the inner Van Allen belt are plotted in B, L-coordinates. Simultaneous determinations obtained with scintillators and with variously screened Geiger counters showed that in the interval of $1.15 \leq L \leq 1.6$ the major part of the registered intensity was related to the electrons from the high-altitude nuclear explosion of July 9, 1962. The 1-order increase of protons with

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ACCESSION NR: AT5023620

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energy of $E_p \gtrsim 30$ Mev since 1958 is explained by the lowering of the solar activity in the 11-year solar cycle. During magnetically quiet days the maximum of intensity in the outer belt was recorded at L = 4.7— 4.8; during increased magnetic activity the maximum was transposed toward lower valued of L. In the inter-belt space a narrow zone was discovered in which electrons with energy $0.1 \leq 1.5$ mev were recorded. Here, the radiation intensity and the maximum location are related directly to the magnetic activity. Stable corpuscular streams, apparently of electrons with energies of 50-100 kev, were registered below the inner belt. Their global distribution indicates that the corpuscles are trapped by the earth's geomagnetic forces. These streams reach a magnitude of 10^5—10^6 $cm^{-2} \cdot sec^{-1}$.

/047

ASSOCIATION: none

SUBMITTED: 02Sep65	ENCL: 00	SUB CODE: ES, SV
NO REF SOV: 000	OTHER: 000	ATD PRESS: 4106

Card 2/2

DULETOVA, T.A.; ASTANKOVA, N.S.; VOLNENKO, N.K.; KULAGIN, Yu.V.; SOKOLOVA, M.F.

Synoptic aerological conditions of the formation of fogs according to the data of Kazakhstan. Trudy KazNIGMI no.11:103-121 '59. (MIRA 13:6)

(Kazakhstan--Fog)

KULAGIN, YU.Z.

KULAGIN, YU.Z.--"Influence of Warming on Certain Species of Trees and Shrubs."*(Dissertations For Degrees In Science And Engineering At USSR, Higher Educational Institutions). (34). Kazan' State U imeni V.I. UL'yanov' Lenin, Biological-Soil Faculty, Kazan', 1955.

SO: Knizhnaya Letopis', No. 34, 20 August 1955

* For the Degree of Candidate in Biological Sciences

KULAGIN, Yu. Z.

Plasitcity of leaf structure. Uch.zap.Kaz.un. 116 no.5:150-152 '56. (MLRA 10:4)

1. Kafedra geobotaniki.
(Leaves--Anatomy)(Birch) (Alder)

KULAGIN, Yu.Z.

The spindle tree Evonymus verrucous Scrop. in the Zhiguli area [with summary in English]. Biul.MOIP.Otdl.biol.63 no.6:101-105 N-D '58 (MIRA 12:1)

(ZHIGULI MOUNTAIN REGION--SPINDLE TREE)

KULAGIN, Yu.Z.

Effect of subsurface flooding on certain tree and shrub species.
Uch. zap. Kaz. un. 118 no. 5:119-183 '58. (MIRA 14:4)
(Trees) (Shrubs) (Water, Underground)

KULAGIN, Yu. Z.

Features of the water cycle in leaves of different forms of birch. Izv. Sib. otd. AN SSSR no. 3:108-115 '60. (MIRA 13:10)

1. Il'menskiy gosudarstvennyy zapovednik Ural'skogo filiala AN SSSR.

(Plants—Water requirements)

KULAGIN, Yu.Z.

Reaction of one-year and two-year-old pines to certain soil factors. Trudy Inst. biol. UFAN SSSR no.16:171-175 '60. (MIRA 13:10)

1. Il'menskiy Gosudarstvennyy zapovednik im. V.I.Lenina.
(Pine) (Forest soils)

KULAGIN, Yu.Z.

Ecologic and taxonomic survey of trees of the Il'men' Preserve. Trudy Il'm. gos. zap. no.8:51-56 '61. (MIRA 15:11)
(Il'men' Preserve--Trees)

KULAGIN, Yu.Z.

Comparative ecologic characteristics of black and green alder, pubescent birch, and Scotch pine in swampy forests of the Il'men' Preserve. Trudy Il'm. gos. zap. no.8:145-155 '61. (MIRA 15:11)
(Il'men' Preserve--Alder) (Il'men' Preserve--Birch)
(Il'men' Preserve--Pine)

KULAGIN, Yu.Z.

Causes of drought resistance in the birch Betula verrucosa. Trudy Inst. biol. UFAN SSSR no. 25:67-73 '61. (MIRA 15:6)
(Ural Mountain region--Birch) (Plants, Effect of aridity on)

KULAGIN, Yu.Z.

Resistance of tree and shrub species to the effect of magnesite dust in the Satka region. Trudy Inst. biol. UFAN SSSR no. 25:131-138 '61. (MIRA 15:6)
(Satka region—Woody plants) (Plants, Effect of magnesite on)

KULAGIN, Yu.Z.

Types of swamp forests in the Il'men' Preserve and their dynamics. Trudy Inst.biol.UFAN SSSR. no.28:45-56 '62. (MIRA 16:1)
(Il'men' Preserve--Forests and forestry)

KULAGIN, Yu.P.

Effect of magnesite dust on trees. Zap. Sverd. otd. VBO no.3: 155-161 '64 (MIRA 18:2)

KULAGIN, Yu.Z.

Ecological and physiological properties of English oak in the Southern Urals. Trudy Inst. biol. UFAN SSSR no. 43: 77-79 '65 (MIRA 19:1)

Gas resistance and drought resistance of woody plants. Ibid.:129-132.

1. Bashkirskiy gosudarstvennyy universitet.

KULAGINA, A.K.; RODINA, A.S.

Working with trade union key personnel. Tekst.prom. 19 no.1:74-77 Ja '59. (MIRA 12:1)

1. Predsedatel' fabkoma Teykovskogo khlopchatobumazhnogo kombinata (for Kulagina). 2. Zaveduyushchiy organizatsionnym otdelom Ivanovskogo obkoma profsoyuza rabochikh tekstil'noy i legkoy promyshlennosti (for Rodina).

(Trade unions) (Textile workers)

DEMIN, A.A.; KULAGINA, A.S.

History of the study of septic endocarditis. Sov.med. 20 no.2:83-87 F '56. (MLRA 9:7)

1. Iz gospital'noy terapevticheskoy kliniki (zav. A.A.Demin) Novosibirskogo meditsinskogo instituta.
(ENDOCARDITIS, BACTERIAL
septic, histor. of study)

GORLANOV, M.G., prepodavat.; POKAZAN'YEV, Aleksandr: ADAMOV, V.V., kand. ist. nauk, retsenzent; KULAGINA, G.A., kand. ist.nauk, retsenzent; BOROZDIN, Ye.A., red.; ZAVAROV, S.I., red.; POPOV, N.Ye., red.; OGOZHKIN, V.N., red.; SILENSKIKH, T.N., red.; TARIKO, A.N., red.; KOLOSNITSYN, V., redaktor; MAKSIMOVA, E., tekhn. red.

[Revda stories; from the history of the Revda Hardware Manufacturing and Metallurgical Plant]Revdinskie vyli; iz istorii Revdinskogo metiznometallurgicheskogo zavoda. Sverdlovsk, Sverdlovskoe knizhnoe izd-vo, 1960. 154 p. (MIRA 15:8)

1. Sekretar' Revdinskogo gorodskogo komiteta Kommunisticheskoy partii Sovetskogo Soyuza (for Silenskikh).
(Revda--Metallurgical plants)

AGEYEVA, A.P.; AKSENOVA-CHERKASOVA, A.S., aspirantka; VELIKANOV, L.N., bibliotekar'; GAVVA, F.M.; GIRENKO, P.D., Geroy Sots. truda; GUBANOV, M.M., pensioner; GUS'KOVA, T.K., nauchnyy sotr.; DAVYDOV, A.G., prepodavatel'; DANILEVSKIY, V.V., prof., dvazhdy laureat Stalinskoy premii; DOVGOPOL, V.I., laureat Stalinskoy premii; YELOKHIN, M.F.; YERMAKOV, A.D.; IVANOV, V.G., prepodavatel'; KOVALEVICH, V.K.; KOVALEVSKAYA, Ye.S., zhurnalistka; PANKRATOV, A.G.; POPOVA, F.M.; URYASHOV, A.V.; FEDORIN, I.M., kand. ist. nauk; FILIPPOV, F.R.; CHUMAKOV, N.P.; SHEPTAYEV, K.T., zhurnalist; VAS'KOVSKIY, O.A., kand. ist. nauk, retsenzent; KULAGINA, G.A., kand. ist. nauk, retsenzent; GORCHAKOVSKIY, P.L., prof., doktor biol. nauk, retsenzent; BAKHMUTOVA, V., red.; SAKNYN', Yu., tekhn. red.

[Nizhniy Tagil]Nizhnii Tagil. Sverdlovsk, Sverdlovskoe knizhnoe izd-vo, 1961. 294 p. (MIRA 16:1)

1. Nizhne-Tagil'skiy krayevedcheskiy muzey (for Ageyeva, Gus'kova). 2. Zaveduyushchiy gorodskim otdelom narodnogo zdravookhraneniya, Nizhniy Tagil (for Velikanov). 3. Zaveduyushchiy gorodskim sel'skokhozyaystvennym otdelom goroda Nizhniy Tagil (for Gavva). 4. Nachal'nik upravleniya stroitel'stvom Sverdlovskogo sovnarkhoza (for Girenko). 5. Deystvitel'nyy chlen Akademii nauk Ukr. SSR, Leningradskiy politekhnicheskiy institut (for Danilevskiy).

(Continued on next card)

KOZLOV, K.M.; KULAGINA, G.B.

Small-size stabilized high-voltage rectifying source. Elektrofiz. app. no.23139-142 '64. (MIRA 18:3)

KULAGINA, G.F., inzh.

Experimental investigation of stresses and flexures in diaphragms.
[Trudy] LMZ no.6:333-346 '60. (MIRA 13:12)
(Diaphragms (Mechanical devices))

PHASE I BOOK EXPLOITATION SOV/5142

Sokolov, V.A., and I.A. Kulagina

Radioaktivnyy izotop kal'tsiya - Ca^{45} (Radioactive Calcium Isotope - Ca^{45})
Moscow, Atomizdat, 1960. 17 p. 6,000 copies printed.

Ed.: G.M. Pchelintseva; Tech. Ed.: N.A. Vlasova.

PURPOSE: This booklet is intended for readers with some previous knowledge of radiochemistry and an interest in the applications of radioactive isotopes.

COVERAGE: The booklet deals with the radioactive properties of isotopes, production methods for Ca^{45}, and synthesis of compounds tagged with Ca^{45}. Examples of Ca^{45} application in science and technology are cited. Principles of accident prevention in work with this isotope are given. Seven preparations containing Ca^{45} that are produced in the Soviet Union are listed in tabular form along with their characteristics and price. No personalities are mentioned. There are 10 references, all Soviet.

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Radioactive Calcium Isotope - Ca^{45} SOV/5142

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JA/dwm/gmp
5-22-61

IRGAB, Kim; RABINOVICH, R.S.; KULAGINA, M.I., mladshiy nauchnyy sotrudnik

P-114-Sh2 spinning machine. Tekst.prom. 20 no.1:27-30 Ja '60. (MIRA 13:5)

1. Vedushchiy inzhener Spetsial'nogo konstruktorskogo byuro tekstil'nogo mashinostroyeniya zavoda Tashtekstil'masha (for Irgab). 2. Starshiy inzhener Glavnogo konstruktorskogo byuro tekstil'nogo mashinostroyeniya (for Rabinovich). 3. TSentral'nyy nauchno-issledovatel'skiy institut sherstyanoy promyshlennosti (for Kulagina).

(Spinning machinery)

KULAGINA, M.I., inzh.

Centrifugal spinning machine for worsted manufacture. Nauch.-issl. trudy TSNIIShersti no.18:27-39 '63. (MIRA 17:2)

KULAGINA, M.Ye.; KOVSMAN, I.D.

Repeated myocardial infarct. Zdravookhranenie 3 no. 5:20-24 S-O '60. (MIRA 13:10)

1. Iz bol'nitsy Lechsanupravleniya (nachal'nik - kand. med.nauk M.G. Zagarskikh) Ministerstva zdravookhraneniya Moldavskoy SSR.
(HEART--INFRACTION)

NEBAROV, V.N., kand. tekhn. nauk; VLASOVA, Ye.F., inzh.; KOZLOVA, L.P. inzh.; KULAGINA, N.I.

Use of the water-oil emulsion thickener in printing with insoluble azo dyes and black aniline. Tekst. prom. 24 no.2: 62-64 F '64. (MIRA 17:3)

1. Sotrudniki TSentral'nogo nauchno-issledovatel'skogo instituta khlopchatobumazhnoy promyshlennosti (for Nebarov, Vlasova, Kozlova). 2. Starshiy laborant TSentral'nogo nauchno-issledovatel'skogo instituta khlopchatobumazhnoy promyshlennosti (for Kulagina).

USSR/Medicine - Toxicology, Lead Poisoning Jul/Aug 53

"The Effect of the Functional Condition of the Central Nervous System on the Course of Lead Poisoning," N. K. Kulagina, F. B. Shakhovskaya, Inst of Labor Hygiene and Occup Diseases, Acad Med Sci USSR

Farmakol i Toksikol, Vol 16, No 4, pp 51-57

Found that Br compounds (i.e. drugs which restore and strengthen inhibitory reactions) alleviate lead poisoning in rats, while agents which contribute to development of the irritation process in the cerebral cortex (i.e. caffeine) aggravate this poisoning.

270T41

270T41

LETAVET, A.A.; RYAZANOV, V.A.; KHOTSYANOV, L.K.; MOROZOV, A.L.; MARTSINKOVSKIY, B.I.; MITEREV, G.A.; IVANOV, V.A.; IZRAEL'SON, Z.I.; ORLOV, N.I.; CHERKINSKIY, S.N.; BERYUSHOV, K.G.; KIBAL'CHICH, I.A.; TARASENKO, N.Yu.; DRAGICHINA, Ye.A.; VORONTSOVA, Ye.I.; SANINA, Yu.P.; KREMNEVA, S.N.; KULAGINA, N.K.; SHAFRANOVA, A.S.; TIKHAYA, M.G.; MOLOKANOV, K.P.; RAZUMOV, N.P.; KURLYANDSKAYA, E.B.; KHALIZOVA, O.D.

In memory of Professor N.S.Pravdin. Gig.i san. no.4:61 Ap '54.
(MLRA 7:4)

(Pravdin, Nikolai Sergeevich,)

L 15672-63 EWA(h)/EWP(t)/EPF(c)/EWA(b)/EWT(l)/EWT(m)/RDS ASD Pa-4/ Pc-4/Pr-4/Ps-4 RM/WW

ACCESSION NR: AT3004517 S/2948/61/000/003/0010/0018

AUTHORS: Kulagina, N. K.; Korbakova, A. I.; Korlyakova, Ye. A. 77

TITLE: Toxicology of organosilicon compounds (A review of the literature)

SOURCE: AMN SSSR. Toksikologiya novykh promyshlennykh khimicheskikh veshchestv, no. 3, 1961, 10-18

TOPIC TAGS: organosilicon compound , alkylsilicone , arylsilicone , chlorosilane , alkylchlorosilane , arylchlorosilane , tetraethylorthosilicate

ABSTRACT: Of the seven-page text, one page is devoted to industrial applications of organosilicon compounds, four pages to the review of five American (1940-1951) and one French (1948) research papers on the toxicology of organosilicon compounds, one-half page to two Soviet (1952-1958) papers, and the balance to the author's summary. It states that one is impressed by the similarity in the toxicological effect of the various organosilicon compounds as to their pronounced irritating properties. This may be due to the liberation of hydrochloric acid in the process of hydrolysis of alkyl- and arylsilanes. An irritation of the skin and eyes takes place upon contact with these materials, while the inhalation of vapors causes a degeneration of the mucous membranes of the upper respiratory

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ACCESSION NR: AT3004517

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tract. As well as a local effect, some of the organosilicon compounds (like the tetraethylorthosilicate) bring about disturbances of a general nature, affecting the nervous and circulatory systems, causing pathological processes in the parenchimatous organs, such as the liver and the kidneys. These observations led a number of investigators to place the organosilicon compounds among highly toxic substances, but observations of individuals exposed to these compounds in laboratories and industries do not seem to substantiate such a point of view. This is particularly applicable to the toxicity level of tetraethylorthosilicate vapors, which may be due to a variation in the experimental setups. A difference of opinions exists also as to whether organosilicon compounds are capable of producing fibrosis in the lungs as does colloidal silica.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 21Aug63 ENCL: 00

SUB CODE: CH NO REF SOV: 008 OTHER: 006

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L 17088-63 FWA(b)-2 /EWP(j)/EPF(c)/EWT(l)/EWT(m)/BDS ASD Pa-4/Pc-4/
Pr-4/Pv-4 RM/WW
ACCESSION NR: AT3004520 S/2948/61/000/003/0033/0048

AUTHORS: Kulagina, N. K.; Korbakova, A. I.

TITLE: Toxicological characteristic of chloromethyltrichlorosilane

SOURCE: AMN SSSR. Toksikologiya novy*kh promy*shlenny*kh khimicheskikh veshchestv, no. 3, 1961, 33-48

TOPIC TAGS: toxicology, organosilicon compound , alkyl-chlorosilane, chloromethyltrichlorosilane, toxicity of vapor

ABSTRACT: Experimental work on the toxicity of chloromethyltrichlorosilane (CMTCS) vapors was conducted on white mice and rats. These were placed for various lengths of time in a 100-l chamber containing 0.6-0.003 mg/l of CMTCS vapors. A single 2-hour exposure to a vapor concentration of 0.15-0.08 mg/l was fatal to all the animals, while 0.02-0.04 mg/l was tolerated, although causing visible damage, and 0.008-0.01 mg/l had only a moderately irritating effect. Repeated 3-hour daily exposures of 20 rats to a vapor concentration of 0.01-0.02 mg/l for 10 weeks resulted in up-and-down shifts in the functional state of the nervous system and caused a 20% increase in the oxygen consumption, beginning with

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ACCESSION NR: AT3004520

the second month. A hematological investigation revealed a trend towards leucopenia, a pronounced reticulocytosis, and anemia, the red count averaging 4 millions and the hemoglobin amounting to 60-80%. Microscopic examination by T. A. Kochetkova revealed a chronic catarrhal state of the respiratory system and hemorrhages in the brain and lungs, with large deposits of hemosiderite in the spleen. Ulceration of the skin and loss of elasticity were also noticed. Additional experiments of daily 3-hour exposures to 0.008-0.01 mg/l of CMTCS vapors were conducted for 6 months on 40 young rats, with only mild pathological changes in the organism. External applications of CMTCS on rabbits and dipping of the tails of mice caused inflammation and resulted in necrosis. It is concluded that CMTCS possesses high toxicity and that the allowable concentration of its vapors in working establishments should not exceed 0.001 mg/l. Orig. art. has: 1 table and 5 figures.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 21Aug63 ENCL: 00

SUB CODE: CH NO REF SOV: 000 OTHER: 000

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L 15673-63 EWA(b)/EWP(j)/EPF(c)/EWA(b)/EWT(l)/EWT(m)/
BDS ASD Pa-4/Pc-4/Pr-4/Pv-4 RM/WW

ACCESSION NR: AT3004521 S/2948/61/000/003/0048/0061

79
77

AUTHORS: Kulagina, N. K.; Korbakova, A. I.

TITLE: The toxicity of dichlorophenyltrichlorosilane

SOURCE: AMN SSSR. Toksikologiya novy*kh promy*shlenny*kh khimicheskikh veshchestv, no. 3, 1961, 48-61

TOPIC TAGS: toxicity, organosilicon compound , chlorinated organosilicon compound , toxicity of vapor

ABSTRACT: The toxicity of dichlorophenyltrichlorosilane (DPTS) vapors was studied on young mice and rats exposed to concentrations within a 0.2-0.006 mg/l range for various length of time. The desired concentration was achieved by pouring the required amount of DPTS into a Petri dish and allowing it to evaporate in a chamber of a given volume. A single 2-hour exposure to 0.08-0.1 mg/l of DPTS vapors was fatal to the experimental animals, while a daily 3-hour exposure to 0.01-0.02 mg/l six days a week for 2½ months was tolerated without fatalities. The chronic effect of a 0.006-0.009 mg/l concentration of DPTS vapors was studied on 40 rats exposed to it daily, six days a week for 8 months. The effect of

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ACCESSION NR: AT3004521

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direct external application of liquid DPTS was studied on rabbits and mice. It was found that the local effect of DPTS vapors is similar to that of other irritating gases, producing at higher concentrations a picture of acute tracheobronchitis, in chronic cases bringing about the formation of perivascular and peribronchial sclerosis. As to the general effect, this involves damage of the circulatory system and dystrophic degeneration of the liver and kidneys, with a less pronounced effect on the red cells except for a slight hemolysis. As to the external application of fluid DPTS, on rabbits it caused necrosis of the skin and on mice necrosis of the tail after a 10-minute dip. The permissible upper concentration of DPTS vapors in working areas should not exceed 0.001 mg/l. F. D. Krivoruchko and T. A. Kochetkova participated in the work. Orig. art. has: 4 figures.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 21Aug63 ENCL: 00

SUB CODE: CH NO REF SOV: 000 OTHER: 000

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L 17087-63 EWA(b)-2/EWP(j)/EPF(c)/EWT(l)/EWT(m)/EDS ASD Pa-4/Pc-4/ Pr-4/Pv-4 RM/WW

ACCESSION NR: AT3004522 S/2948/61/000/003/0061/0073

75

AUTHORS: Kulagina, N. K.; Korbakova, A. I.

TITLE: Toxicology of phenylmethyldichlorosilane

SOURCE: AMN SSSR. Toksikologiya novykh promyshlennykh khimicheskikh veshchestv, no. 3, 1961, 61-73

TOPIC TAGS: toxicology, chlorosilane , phenylmethyldichlorosilane, toxicity of vapor

ABSTRACT: Experimental work on the toxicity of phenylmethyldichlorosilane (PMDS) vapors was conducted on mice and rats exposed to concentrations of 1.3-0.006 mg/l for various periods of time. External applications of liquid PMDS on mice and rabbits were also studied. The inhalation experiments were conducted in a 100-l chamber into which measured amounts of PMDS were introduced and allowed to evaporate from filter paper. A single 2-hour exposure to 0.2-0.3 mg/l was fatal, while 0.02-0.04 mg/l was tolerated. In both groups clinical symptoms of irritation of mucous membranes and respiratory function were evident, and microscopic examination revealed an interstitial inflammatory process in the lungs, necrotic foci in

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L 17087-63

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the liver, degenerative changes in the convoluted tubes of the kidneys, and necrotic changes in the spleen. Repeated daily 3-hour exposure to a concentration of 0.01-0.02 mg/l for a 10-week duration produced functional changes in the nervous system, and an increase in oxygen consumption beginning with the second month. Microscopic examination revealed only some slight pathological changes in the lungs. Studies of daily exposure six days a week for 13½ months to 0.006-0.009 mg/l of PMDS vapors revealed few clinical symptoms, but resulted in edema and hemorrhages in the lungs, as well as connective tissue growth around the bronchi, large deposits of hemosiderin in the spleen, parenchimatous degeneration of liver and kidney cells and cerebral degeneration up to necrosis. External application of liquid PMDS produced necrosis of the skin in rabbits and necrosis of the tail in mice, even after 1-minute immersion. A 5-minute immersion of the tail also caused severe pathological changes in the internal organs. It is recommended that the upper permissible concentration of PMDS vapors in work areas be set at 0.001 mg/l. Orig. art. has: 1 table and 4 figures.

SUBMITTED: 00 DATE ACQ: 21Aug63 ENCL: 00

SUB CODE: CH NO REF SOV: 000 OTHER: 000

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L 17086-63 EWA(b)-2 /EPF(c)/EWT(1)/EWT(m)/BDS ASD Pa-4/Pr-4/Pv-4 RM/WW
ACCESSION NR: AT3004523 S/2948/61/000/003/0073/0080

71

AUTHOR: Kulagina, N. K.

TITLE: Toxicological characteristic of silicochloroform

SOURCE: AMN SSSR. Toksikologiya novy*kh promy*shlenny*kh khimicheskikh veshchestv, no. 3, 1961, 73-80

TOPIC TAGS: Toxicology, silicochloroform, toxicity of vapor

ABSTRACT: The toxicity of silicochloroform vapors was studied on white mice and rats that were exposed to concentrations of 6.2-0.002 mg/l in a 108-l chamber into which measured amounts of silicochloroform were introduced. Additional studies on the effect of external silicochloroform application were conducted on rabbits and mice. A single 2-hour exposure revealed that a 1 mg/l concentration of silicochloroform vapors constituted the upper margin of survival. Daily 3-hour exposures to 0.01-0.04 mg/l for a 6-month period resulted in a lowering in the hemoglobin content to 65-75%. The histological study by T. A. Kochetkova under the direction of Prof. P. P. Dvizhkov revealed a mild chronic catarrhal condition

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of the lungs and some signs of irritation of the reticuloendothelial system in the liver and kidneys. Local application of silicochloroform on the skin resulted in necrosis. A 2-minute dip of the tails of mice in silicochloroform caused necrosis and loss of the tail within 2 days in 50% of the mice. A subsequent 5-minute tail dip of the surviving animals caused them to die within 24 hours. The autopsy revealed a pronounced congestion of all the internal organs. Severe damage to the eyes was caused by direct contact with silicochloroform. It is suggested that in view of the unlikeliness of the penetration of the intact silicochloroform molecule into the interior of the organism on exposure to its vapors, the damage found in the internal organs should be attributed to its hydrolysis products. It is recommended that not over 0.001 mg/l of silicochloroform vapors should be allowed in work areas, especially in view of its high volatility as its boiling point is 31.8C. Orig. art. has: 1 table.

ASSOCIATION: none

SUBMITTED: 00	DATE ACQ: 21Aug63	ENCL: 00
SUB CODE: CH	NO REF SOV: 000	OTHER: 000

L 15674-63 EWA(b)/EWP(j)/EPF(c)/EWA(b)/EWT(l)/
EWT(m)/BDS ASD Pa-4/Pc-4/Pr-4/Pv-4 RM/WW

ACCESSION NR: AT3004524 S/2948/61/000/003/0081/0101

AUTHORS: Kulagina, N. K.; Korbakova, A. K.; Kochetkova, T. A.

TITLE: Comparative toxicity of some monomeric organosilicon compounds and of products from which they are derived

SOURCE: AMN SSSR. Toksikologiya novy*kh promy*shlenny*kh khimicheskikh veshchestv, no. 3, 1961, 81-101

TOPIC TAGS: toxicity, silicon tetrachloride derivative , organosilicon compound , alkylchlorosilane , arylchlorosilane , cumulative property, silicosis

ABSTRACT: This paper contains new experimental data by the authors on the comparative toxicity of some monomeric organosilicon compounds, some materials obtained by Ye. A. Korlyakova at the laboratory of industrial toxicology, as well as some data from the literature. The high toxicity of all organic derivatives of silicon tetrachloride and their considerable potential danger to the organism under various ways of application are impressive. This is supported by the low absolute figures of effective doses and concentrations, the narrow zone of toxic effect, the ability of low concentrations of the compounds to produce chronic changes in the organism, as well as the pronounced necrotic effect on direct

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ACCESSION NR: AT3004524

contact with the tissues. Of record is the general character of the effect on the organism of all organosilicon monomers. In the picture of acute intoxication caused by various substances the symptoms of irritation stand out. These are produced not only by chloroderivatives but also by substances which do not contain chlorine, e.g., ethoxysilanes. It is assumed that the irritating properties of organosilicon compounds are due mainly to the effect of the silane part while the presence of chlorine and the formation on hydrolysis of HCl may enhance them. The introduction into the chlorosilanes of organic radicals increases their toxicity, the aryl-derivatives being more toxic (in absolute figures) than the alkylated compounds, but the effective toxicity of arylchlorosilanes is comparatively small due to their low volatility. The chlorination of organic radicals in the molecule of organosilicon compounds enhances the absolute toxicity of the formed compounds, and if organochlorosilanes are more toxic as compared with silicon tetrachloride, then chloro-organochlorosilanes are still more toxic. Some of the organosilicon compounds posses not only pronounced irritating properties but general toxicity as well. This is evidenced in expanded vascular disturbances and in dystrophic changes of the parenchimatous organs. The general effect is more pronounced with arylchlorosilanes and ethoxysilanes, which is due to the relatively lesser susceptibility of these compounds to hydrolysis and a greater solubility in lipids, which permit the whole molecule to exert its effect on the

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000927320010-7"

organism. Basically, silicochloroform and methylphenyldichlorosilane act as local-acting toxins. The investigated compounds can be scaled according to their irritating properties in the following ascending order: ethylchlorosilane, methyltrichlorosilane, chloromethyltrichlorosilane, phenyltrichlorosilane, dichlorophenyltrichlorosilane, phenylmethyldichlorosilane, and silicochloroform. The mechanism of the irritating properties of organosilicon compounds remains obscure. One may assume that the pronounced toxic effect of organosilicon compounds develops by the interaction of the unsplit molecule of the product with the tissues. Hydrolysis may thus take place, with the formation of decomposition products "in statu nascendi", making them more active. After prolonged systematic exposure to low concentrations of monomeric organosilicon compounds the resulting toxicity effects are of moderate character and are accompanied by sclerotic changes of the lungs and by emphysema. The morphological changes in chronic cases are lacking specific characteristics and are similar to the ones produced by other irritating toxins. In contrast to the lesions produced by other inorganic silica compounds, some of the organosilicon compounds, such as phenylmethyldichlorosilane, are capable of provoking a leucocitary-type reaction in the tissues. The experiments did not reveal any fibrosis which would be typical for silicosis. After 13 1/2 months (under the effect of chloromethyltrichlorosilane) there appeared some milliary dust nodes remotely resembling those found in silicosis.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000927320010-7"

L 18432-63 EPF(c)/EWT(m)/BDS Pr-4 RM/WW

ACCESSION NR: AT3004513 S/2948/62/000/004/0008/0019

AUTHOR: Kulagina, N. K. 61 60

TITLE: Toxicity of mixed hydrocarbon gas with an excess of saturated compounds

SOURCE: AMN SSSR. Toksikologiya novy*kh promy*shlenny*kh khimicheskikh veshchestv, no. 4, 1962, 8-19

TOPIC TAGS: toxicity, hydrocarbon gas, saturated hydrocarbon, propane, ethane, propylene

ABSTRACT: The investigated gas mixture (prepared at the Moscow gas plant by L. S. Chemodanova) consisted of 50.15% propane, 19.3% ethane, 15.10% propylene, and 15.45% air. A. I. Yerbakova conducted the single 2-hour exposure on white mice and rats exposed in a 108-liter chamber to gas concentrations of 2-500 mg/liter. It was found that a gas mixture below a 50 mg/liter-level does not produce noticeable clinical symptoms, while a 50-65 mg/liter-range affects the conditional reflexes. A concentration of 110-126 mg/liter resulted in a slight but pronounced narcotic effect, followed by uncoordinated movements, which soon disappeared after the exposure was over, but it took 30 days for the conditional reflexes to return to normal. And at 400-500 mg/L there appeared all phases of narcotic condition up to deep

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L 18432-63
ACCESSION NR: AT3004513

narcosis. The chronic effect of the gas mixture was studied on 15 rats exposed to a concentration of 9-14 mg/liter for a period of 6 months. The gas analysis was performed by F. D. Krivoruchko. It was found that the effect of exposure on the state of conditional reflexes fluctuated between periods of impaired function and normalcy. At the end of exposure the hemoglobin content dropped to 65-75% as compared with the normal 85-95%, and the swimming test (performed under special conditions) revealed a 75% loss of endurance, as compared with the controls. Microscopic examination showed mild dystrophic processes in the parenchimal organs of all rats. These findings cause the author to issue a warning about the potential dangers of chronic exposure to hydrocarbon vapors of the methane series in excess of the 0.3 mg/liter limit. Orig. art. has: 5 charts and 1 table.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 21Aug63 ENCL: 00

SUB CODE: CH NO REF SOV: 000 OTHER: 000

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KULAGINA, N.K.

Toxicity of the gaseous mixture of hydrocarbons with a quantitative preponderance of saturated compounds. Toks.nov.prom. khim.veshch. no.4:3-19 '62. (MIRA 16:1)
(HYDROCARBONS--TOXICOLOGY)

L 18431-63 EPF(c)/EWP(q)/EWT(m)/BDS AFFTC/ASD/RPL Pr-4 WW/JD/JW

ACCESSION NR: AT3004514 S/2948/62/000/004/0065/0081

64

AUTHOR: Kulagina, N. K.

TITLE: Toxicological characteristic of hydrazine 27

SOURCE: AMN SSSR. Toksikologiya novy*kh promy*shlenny*kh khimicheskikh veshchestv, no. 4, 1962, 65-81

TOPIC TAGS: toxicology, hydrazine, vapor toxicity

ABSTRACT: The purpose of the investigation was to establish safety levels of hydrazine and hydrazine vapors in various application methods. The product used contained 96.5% hydrazine, 1% ammonia, and 2.5% water. The acute toxicity of hydrazine was studied on white mice of 20 gms body weight. Aqueous solutions of hydrazine (neutralized with HCl) were administered perorally by means of a stomach tube. Doses of 20-120 mg/kg were given, and it was found that 120 mg/kg constituted a lethal dose and 40 mg/kg a tolerable one. The clinical picture of intoxication was manifested by irritation of the mucous membranes of the eyes and the upper respiratory tract and by a state of agitation with or without cramps. The morphological changes in the internal organs of mice which died within 1-2 days were studied with the assistance of M. S. Tolgskaya and Prof. P. P. Dvizhkov. These changes

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showed congestion, hemorrhages, and edema, as well as necrobiotic processes in the liver and kidneys. The inhalation experiments were conducted on mice and rats, which were placed in a 100-liter chamber containing from 2.0 to 0.0001 mg/liter of hydrazine vapors, which were permitted to evaporate from open dishes, the concentration being checked by T. V. Solov'yeva. A single exposure to 1-2 mg/liter for a 2-hour period was fatal to only a few animals; a double exposure — to nearly half, and a triple exposure — to all the animals. Concentrations of 0.5-0.8 mg/liter proved tolerable, even when the 2-hour exposure was repeated 8 times. The clinical symptoms were those of irritation of the mucous membranes and of agitation, the temperature dropped 0.5-1.0C, and the blood pressure went down to 85-100mm. Examination of the fatal cases as well as those killed for autopsy showed congestion, hemorrhages, and edema of all the organs, including the brain, and inflammatory and degenerative processes in the lungs, liver, and kidneys, up to necrobiosis. A study of the conditional reflexes in rats subjected to a single exposure of 0.075 mg/liter of hydrazine vapors revealed their accentuation during the first part of the post-exposure period, which was soon followed by a period of damping, then a return to normal after 5-7 days. The threshold concentration of toxicity of hydrazine vapors for a single exposure was set at 0.02, with excitation of the central nervous system being the main manifestation. Studies on chronic intoxication with hydrazine vapors were conducted at concentrations of 0.001-0.005 mg/liter to which

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ACCESSION NR: AT3004514

20 mice were exposed for 1 month and 10 rats for 3 months (with some fatalities). The main clinical manifestations were loss of weight, a drop in hemoglobin to 50-65%, and a leucocytosis of 18 000-21 000. Microscopic examination revealed morphological changes in the lungs, liver and kidneys after a daily 4-hour exposure of 20 white rats to a concentration of 0.0001-0.0008 mg/liter of hydrazine vapors for a 7-months period. Some excitability of the central nervous system was observed, and pathological examination of the organs of killed animals revealed a moderate catarrh condition in the lungs, some dystrophic changes in the liver, and deposition of brown pigment in the spleen. The local effect of hydrazine on external application was studied on rabbits. One drop was capable of causing severe local inflammation, resulting in ulceration. The absorption of hydrazine through the skin was investigated by dipping the tails of white mice for a 1-hour period. This resulted in the death of the experimental animals within 1-2 days. A pathological examination revealed symptoms of general intoxication analogous to those obtained on exposure to vapors — an indication of the penetration of hydrazine through the skin. It is recommended that the allowable concentration of hydrazine vapors in work areas should not exceed 0.0001 mg/liter. Orig. art. has: 3 charts.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 21Aug63 ENCL: 00

SUB CODE: CH NO REF SOV: 003 OTHER: 007

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KULAGINA, N.K.; KOCHETKOVA, T.A.

Toxicological characteristics of methylchlorophenyldichlorosilane. Toks. nov. prom. khim. veshch. no.5:149-165 '63.

Experimental materials on the determination of the toxicity of methyl chlorophenyldichlorosilane. Ibid.:165-173

Toxicity of ethylphenyldichlorosilane. Ibid.:173-182

Toxicological characteristics of methylchloromethyldichlorosilane and dimethylchloromethhlchlorosilane. Ibid.:183-192

Toxicology of ethoxysilanes. Ibid.:193-214

Toxicity of the products of thermal degradation of methylphenylpolysiloxane resin and some brands of foam plastics on an organosilicon base. Ibid.:214-222 (MIRA 17:9)

KULAGINA, N.K.; KOCHETKOVA, T.A.

Toxicity of the binding agent of the AG4-P brand. Toks. nov. prom. khim. veshch. no.6:109-116 '64. (MIRA 18:4)

[illegible], N.F.; KOCHETKOVA, T.A.

Toxicity of triethylamine. Toks. nov. prom. khim. veshch. no.7:56-76 '65. ([illegible])

USSR / Farm Animals. Cattle. Q

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 7337

Author : Kulagina, N. N.
Inst : Moscow Academy of Agriculture imeni K. A. Timiryazev
Title : The Changes of Calcium and Phosphorus Contents in Cow's Milk Depending upon Lactation

Orig Pub : Dokl. Mosk. s.-kh. akad. im. K. A. Timiryazeva, 1957, vyp. 30, ch. 2, 191-196

Abstract : In 1951 to 1956 investigations studying the presence of Ca and P in cow's milk during the course of lactation were conducted at a farm of the Timiryazev Academy of Agriculture. The largest quantity of Ca was found in the milk of the first month of lactation, which was followed by a gradual decline until the 4th

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Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 7337

month; then the quantity of Ca increased again. There were individual differences in Ca and P contents. The quantity of Ca in milk decreased during the summer months, the quantity of P decreased during the early spring months. In highly productive cows more Ca was secreted with milk during the first than during the fourth lactation; the correlation of Ca and P decreased.

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KULAGINA, N.N.

KULAGINA, N.N., Cand Agri Sci -- (diss) "Effect of certain factors upon the content of calcium and phosphorus in cow's milk." Mos, 1958. 16 pp (Mos Order of Lenin Agr Acad im K.A. Timiryazev). 110 copies (KL,20-58,100)

OLENICHEV, S.I.; KULAGINA, O.I.; POPOV, N.I.

Foreign bracket-milling machines; survey. Stan. i instr. 36 no.11:34-36 N '65. (MIRA 18:11)

LYAPUNOV, A.A., professor; KULAGINA, O.S.

Using calculating machines in translating from one language into another. Priroda 44 no.8:83-85 Ag '55. (MLRA 8:10)

1. Matematicheskiy institut imeni V.A.Steklova Akademii nauk SSSR
(Translating machines)

SOV/112-57-5-10763

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1957, Nr 5, p 165 (USSR)

AUTHOR: Kulagina, O. S.

TITLE: On Machine Translation From French Into Russian
(O mashinnom perevode s frantsuzkogo na russkiy)

PERIODICAL: Tr. 3-go Vses. matem. s"yezda. Vol 1. M., AS USSR, 1956, pp 192-193

ABSTRACT: Principal points of a report on a tentative translation of mathematical and engineering texts from French into Russian produced by the "Strela" machine.

V.P.R.

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KULAGINA, O. S.: Master Phys-Math Sci (diss) -- "Some theoretical problems in machine translation". Moscow, 1958. 7 pp (Acad Sci USSR, Dept of Applied Math of the Math Inst im V. A. Steklov), 150 copies (KL, No 6, 1959, 124)

LYAPUNOV, A. A. and KULAGINA, O. S. (Moscow)

"About the Work by Machine Translation of the Mathematics Institute AS SSR."

Theses - Conference on Machine Translations, 15 - 21 May 1958, Moscow.

KULAGINA, O. S. (Moscow)

"Concerning Automatization of the Programming of Translation."
"Concerning the Algorithm of Translations from the French Language into Russian"

Theses - Conference on Machine Translations, 15-21 May 1958, Moscow.

SOV/112-59-17-36630

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 17, p 117 (USSR)

AUTHOR: Kulagina, O.S.

TITLE: On a Method of Definition of Grammatical Conceptions on the Base of the Set Theory

PERIODICAL: V sb.: Probl. kibernetiki. Nr 1. Moscow, Gos. izd-vo fiz.-matem. lit., 1958, pp 203-214

ABSTRACT: The article has not been reviewed.

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AUTHOR: Kulagina, O.S. SOV/140-58-5-5/14

TITLE: Mechanical Translation From French (Mashinnyy perevod s frantsuzskogo yazyka)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Matematika, 1958, Nr 5, pp 46-51 (USSR)

ABSTRACT: The paper is a report concerning the work on the mechanical translation from French into Russian language. At the end of 1954 the establishment of a translation algorithm and of a dictionary was started. Under restriction to mathematical texts a dictionary with 1200 words and 250 special expressions was established. The translation algorithm was empirically set up, the work of a man during the translation is analyzed and fixed as rules. After numerous corrections resulting from further experiments a stable control table for translations sentence by sentence was obtained. This work was finished about in February 1956. Then 11 persons began with the programming and coding of the dictionary. The translation algorithm was realized by 17 programs. The whole program consisted of about 7000 commands, where in addition 1800 cells are occupied by tables and constants. The dictionary is fixed on a magnet band, divided into 26 zones and occupies 12000 cells. The translation of one

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sentence with 8-10 words requires 45000-50000 steps and lasts about 1,5-2 minutes. The first translation was carried out in June 1956.
The work on the improvement of the machine is not yet finished and is carried out in three directions: 1. Improvement and completion of the algorithm on the basis of the experiences. 2. Elaboration of a formal grammatical system. 3. Automatization of the programming.

ASSOCIATION: Matematicheskiy institut imeni V.A.Steklova AN SSSR
(Mathematical Institute imeni V.A.Steklov AS USSR)

SUBMITTED: November 25, 1957 (Date of Lecture Leningrad)

KULAGINA O.S.

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KULAGINA, O. S. /In 1959 at the Mathematical Institute imeni V. A. Steklov, Academy of Sciences USSR/- "The use of computer for research in mechanical translation" (Invited paper, Session 9)

KUZNETSOV, O. P., Institute of Automatics and Telemechanics, Academy of Sciences USSR /1960 position/- "On the asynchronous logical circuits" (Session 11 or 20)

MIKHALEVICH, V. S., Head, Economic Cybernetic Section, Computer Center, Academy of Sciences Ukrainian SSR, Kiev /1961 position/- "A method of successive analysis of variants for numerical solution of the problems of optimal planning and designing" (Session not indicated)

SOBOLEV, S. L., Institute of Mathematics and Computation Center, Siberian Department, Academy of Sciences USSR, Novosibirsk - "Investigation of the written language of ancient Maya with the aid of computers" (Session 38)

SPIRIN, A. A., Scientific Research Institute of Computer Machine Building, Moscow /1961 position/- "Technical means and organization of centralized system for data processing in industry" (Session 25)

TIKHEYEV, A. A. /Received Candidate's degree in 1961 from Moscow Higher Technical School imeni N. E. Bauman/- "Microprogramming control in digital computers" (Session 42)

report to be submitted for the 2nd Intl. Congress for Information Processing, IFIPS, Munich, West Germany, 27 Aug - 1 Sep 1962.

KULAGINA, O. S.; NIKOLAYEVA, T. I.; MARTYNOVA, A. I.

"Mechanical Translation at the Academy of Sciences of the USSR."
Paper presented by A. I. MARTYNOVA at the Int'l Conference for Standards on a Common Language for Machine Searching and Translation, Cleveland, Ohio, 6-12 Sep 59.

S/044/63/000/002/048/050
A060/A126

AUTHOR: Kulagina, O.S.

TITLE: Operator description of translation algorithms

PERIODICAL: Referativnyy zhurnal, Matematika, no. 2, 1963, 95, abstract 2V538 (In collection "Mash. perev. i prikl. lingvistika", no. 2 (9), Moscow, 1959, 6 - 22)

TEXT: A special form is proposed for the writing of algorithms for translation from one language into another which may be used to automate their programming. It is indicated that despite the multifariousness of the possible forms of translation algorithms the rules of linguistic analysis have much in common for the most differing languages. They consist of sequential tests of a series of conditions and of certain transformations of the information obtained from the tests. On the basis of an analysis of a program for the translation from French into Russian the author has selected a small number of standard actions (tests and transformations) or operators from which one can construct any translation algorithms. The programming of translation with the aid of the op-

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